ABSTRACT OF THE DISCLOSURE

An insertable wand is used in a multi-nuclear NMR probe enabling the probe to detect and obtain data from various combinations of nuclei. The particular combination of frequencies is determined by various electrical components, and parts within the wand that are designed to cooperate with a tube, to form an adjustable ¼ wave assembly. The adjustable ¼ wave assembly component in the wand comprises a metal rod with an adjustable conductive collar and spring contacts such that when inserted into the tube, the rod and the tube to form an adjustable ¼ wave circuit or a ¼ wave shorted stub. The tube may form part of the wand or the probe. When the wand is plugged into the probe, the combination of the NMR coil within the probe and the adjustable ¼ wave shorted stub provides means for the NMR circuit to resonate at two separate frequencies.